

<p>99-054452/05 A97 E19 H07 IDEK 97.05.02 IDEMITSU KOSAN CO LTD *JP 10306292-A</p> <p>97.05.02 97JP-114805 (98.11.17) C10M 163/00 (C10M 133:16, 137:02, 159:24, 163/00) (C10N 10:04, 30:00, 30:02, 30:04, 40:04)</p> <p>Automatic transmission fluid composition - comprises base oil contg. calcium sulphonate and phosphorus acid esters. C99-016639</p>	<p>A(12-W2) E(5-B1, 5-G9B, 10-A9B) H(8-D5) H0062</p>
<p>An automatic transmission fluid composition comprises combining (A) Ca sulphonate of 50-100 mg.KOH/g. in total base value and (B) phosphorus acid esters with base oil.</p> <p><u>USE</u> The automatic transmission fluid composition is useful as lubricating oil for e.g. variable speed transmission.</p> <p><u>ADVANTAGE</u> The automatic transmission fluid composition has long life of preventing shudder for slip-lock-up device and long life of preventing scratch noise for belt type variable speed transmission.</p> <p><u>PREFERRED CONDITION</u> The base oil contains an agent of raising viscosity index. At least</p>	<p>a kind of friction-regulating agent selected from (C) sarcosine derivative and (D) the reaction products of carboxylic acid and amine is combined with the fluid composition.</p> <p><u>EMBODIMENT</u> Base oil is e.g. mineral oil(e.g. paraffin type mineral oil) or synthetic oil(e.g. poly-alpha-olefin). Agent of raising viscosity index is e.g. polymethacrylate or polyisobutylene. Ca sulphonate(A) is e.g. calcium salt of aromatic petroleum sulphonic acid or alkyl sulphonic acid. Phosphorous acid esters(B) are e.g. triethyl phosphite or tributyl phosphite. The amt. of phosphorous acid esters is 0.01-5 wt.%, pref. 0.1-3 wt.%, based on base oil. Sarcosine derivative(C) is e.g. oleyl sarcosine or stearyl sarcosine. Carboxylic acid for (D) is e.g. lauric acid or palmitic acid and amine is e.g. diethylenetriamine or triethylenetetramine.</p> <p><u>EXAMPLE</u> An automatic transmission fluid composition was prepared by combining polymethacrylate of 50000 in number-average molecular weight(11.0 wt.%), Ca sulphonate of 80 mg.KOH/g. in total base value(0.50 wt.%), diolel hydrogen phosphite(0.20 wt.%), oleyl sarcosine(0.20 wt.%), the reaction product of isostearic acid and tetraethylenepentamine(0.40 wt.%) and other additives such as antioxidant, non-ash dispersing agent, metal-inactivating agent and defoaming agent(5.13 wt.%) with paraffin type mineral oil(base oil)(the rest). (9pp050DwgNo.0/0)</p>